"They rose early at the 'Hôtel des Neufchâtelois'; on the stroke of four they had to be up. The time of dressing was rather trying, as the water was so cold and made them shiver; but that over, nothing more was thought of than continuing their research. Agassiz volunteers to bore holes; the ice can only be cut with great difficulty, for it resists the instruments. While this operation is being done, Carl Vogt examines the red snow, the strange hue of which is due to the presence of myriads of microscopic beings; he discovers many kinds of infusoria, and a pretty rotifer sowing the snow with its purple-coloured eggs.

"Carl Vogt was never inactive; in the last years he published, together with M. Jung, a treatise on zoology. Every one will acknowledge that a life so well spent is an honour to humanity." W.

NOTES.

Science is but poorly represented in the list of the Queen's birthday honours. Lord Playfair, previously a K.C.B., has accepted the honour of G.C.B. Rear-Admiral W. J. L. Wharton, Hydrographer to the Navy, has been made a Companion of the Order of the Bath. Mr. W. M. Conway, whose climbs in the Himalayas led to the publication of some interesting scientific results, has been knighted.

Dr. E. Frankland, F.R.S., Correspondent of the Paris Academy of Sciences, has been elected Foreign Associate, in the place of the late Prof. van Beneden.

Dr. Esmarch, of Kiel, has been elected a Correspondent of the Paris Academy of Medicine.

Prof. Thommsen, who has been a Corresponding Member of the French Academy of Inscriptions since 1860, has been elected a Foreign Associate, in the place of the late Sir H. Rawlinson.

The *Times* correspondent at Melbourne says that a meteorological observatory has been established on the summit of Mount Wellington, Tasmania.

A million acres of forest land has been reserved by the Province of Ontario as a great natural park for the preservation of native animals and plants.

The discourse at the Royal Institution to-morrow evening will be delivered by the Earl of Rosse, the subject being, "The Radiant Heat from the Moon during the progress of an Eclipse." That on June 7 will be by Prof. A. Cornu, F.R.S. This lecture will be delivered in French, and the title will be, "Phénomènes Physiques des Hautes Régions de l'Atmosphère."

Through a gift of Mr. W. C. McDonald (says *Science*), McGill University has secured thirty-five acres of land for botanical gardens and an observatory. From the same source we learn that the residue of the estate of Mary D. Peabody has been left to the Catholic University of Washington, for the foundation of scholarships (probably three or four of the value of 5000 dollars each) in the chemical and physical sciences.

Among the appointments abroad, we notice that Dr. N. V. Ussing has accepted the Professorship of Mineralogy in the University of Copenhagen, Dr. F. Karsch has become Extraordinary Professor of Zoology in Berlin University, Prof. Emil Behring has become Ordinary Professor of Hygiene at Marburg, and Dr. Zorawski (privat-docent in mathematics at Krakau) has been promoted to an Extraordinary Professorship.

The electrical power developed at the Niagara Falls will soon take the place of steam for several hundred miles distance rom the Falls, including New York City. An important proposed application is to the Erie Canal, which has just opened for the season. Experiments will be made for applying the power by a trolley system, and the reduction of expense will probably drive out all other means of transportation for grain, &c., from Buffalo to tide water, during the season of navigation.

At the International Horticultural Congress, opened at Paris on Saturday, resolutions were unanimously adopted to the effect: "(1) That the French Government should associate itself with the request addressed by the Italian Government to the Swiss Confederation, with a view of obtaining the revision of the Berne International Convention, and the free circulation between all countries signatory to the convention, of all vegetables and vines, accompanied by a certificate of origin; and (2) that the postal administration should return to the old reduced tariff, of which periodical publications on horticulture have hitherto had the advantage."

Efforts are being made (says the *American Naturalist*) to raise a fund of 12,000 dollars for the purpose of bringing Mr. Peary and his two assistants home from North-west Greenland early next autumn, and, in connection with this, to prosecute scientific investigations during the available summer season. It is hoped, by this means, to charter and fit out a staunch steamer, built for Arctic service and commanded by experienced Arctic navigators, which shall start from St. John's, Newfoundland, on or about July 5, 1895, for Inglefield Gulf, North-west Greenland, lat. 78° N., Mr. Peary's headquarters.

We have received a notice concerning three "Priestley" Scholarships in Chemistry, two "Bowen" Scholarships in Engineering, and one in Metallurgy, which have been founded by the late Mr. T. Aubrey Bowen, of Melbourne. They are intended to encourage and afford facilities for the higher study of these subjects in Mason College, where they are tenable for one year, with the possibility of renewal at the discretion of the Council of the College. The annual value of each is £100. Although, naturally, good work done at Mason College will be regarded as a specially favourable qualification, the Council have generously thrown all the Scholarships open to general competition. The first award will be made in September next, and all particulars may be learned on application to the Secretary of the College.

The gold medal of the Linnean Society has this year been awarded to Prof. Ferdinand Cohn, of Breslau, whose name is well known in connection with the *Botanic Journal*, which he has conducted, largely adorned with his own contributions, from 1870 to the present time. The work of Dr. Cohn extends over half a century. He was one of the earliest to investigate the life-history of the lower Algæ, and to demonstrate that they are not asexual. His important paper on *Protococcus pluvialis*, published so long ago as 1850, was translated by Busk for the Ray Society. Subsequent papers by him, on the mode of reproduction of *Sphæroplea annulina*, and on the development of *Volvox*, mark a distinct advancement in botanical science. The medal referred to was awarded to him at the anniversary meeting of the 24th inst., and has been forwarded to Breslau, for his acceptance, through the German Embassy.

At the anniversary meeting of the Royal Geographical Society, held on Monday, the Founder's Medal was presented to Dr. John Murray for his services to physical geography, and especially to oceanography during the last twenty-three years, also for his maps of the floor of the ocean, his calculations regarding the volume of continents and oceans, his study of the origin and formation of coral deposits, and for the stimulus he has given to researches in physical geography. The other awards were the Patrons' Medal, to the Hon. George N. Curzon, M.P., (1) for his work on the history, geography, archæology, and politics of Persia; (2) for his journeys in

French Indo-China, which have resulted in further publications of geographical as well as political and general value; and (3) for his journey to the Hindu Kush, the Pamirs, and the Oxus, together with a visit to the Amir of Afghanistan, in his capital of Kabul. The Murchison Grant, to Mr. Eivind Astrup, for his remarkable journey, with Lieut. Peary, across the interior glacier to the northern shores of Greenland; and for his independent journey along the shores of Melville Bay; the Back Grant, to Captain C. A. Larsen, for the geographical and meteorological observations made by him during his Antarctic voyage in 1894, and for his discovery of an active volcano on Christensen Island, of several other islands, and of part of the east coast of Graham Land; the Gill Memorial for 1895, to Captain J. W. Pringle, R.E.; and the Cuthbert Peek Grant for 1895, to Mr. G. F. Scott-Elliot, for his explorations of Mount Ruwenzori, and of the region to the west of the Victoria Nyanza.

WE wish the American Metrological Society success in its efforts to extend the use of the metric system in the United States, and to procure general agreement with regard to the constants of science. Its objects are ambitious, as the following statement of them, from *Science*, will show: (1) To improve existing systems of weights, measures and moneys, and to bring them into relations of simple commensurability with each other. (2) To secure universal adoption of common units of measure for quantities in physical observation or investigation, for which ordinary systems of metrology do not provide, such as divisions of barometer, thermometer, and densimeter; amount of work done by machines; amount of mechanical energy, active or potential, of bodies, as dependent on their motion or position; quantities of heat present in bodies of given temperatures, or generated by combustion or otherwise; quantity and intensity of electro-dynamic currents; aggregate and efficient power of prime movers; accelerative force of gravity; pressure of steam and atmosphere; and other matters analogous to these. (3) To secure uniform usage as to standard *points of reference*, or physical conditions to which observations must be reduced for purposes of comparison, especially temperature and pressure, to which are referred specific gravities of bodies, and the zero of longitude on the earth. (4) To secure the use of the decimal system for denominations of weight, measure, and money derived from unit-bases, not necessarily excluding for practical purposes binary or other convenient divisions, but maintained along with such other methods, on account of facilities for calculation, reductions, and comparison of values, afforded by a system conforming to our numerical notation.

ON January 18, the great seismometrograph at the Osservatorio del Collegio Romano at Rome registered five complete pulsations of slow period characteristic of earthquakes originating at a great distance. They commenced at 4h. 37m. 30s. p.m. (Greenwich mean time), and lasted 1m. 22s., giving an average duration of 16·4 seconds for each pulsation. On the same day a severe earthquake was felt along the east coast of Japan, and was recorded at Tokio at 3h. 48m. 24s. The distance between this place and Rome being about 9500 km., the pulsations must have travelled with an average velocity of 3·2 km. per second (see NATURE, vol. l. pp. 450-51; vol. li. p. 462). At Nicolaiew and Charkow, in the south of Russia, the horizontal pendulums were disturbed for nearly an hour, the epoch of maximum amplitude occurring a few minutes earlier than at Rome.

MR. MARSHALL HALL publishes in the *Alpine Journal* (vol. xvii. p. 438) a note on the progress made in the study of glaciers, for which purpose a Committee was appointed at the meeting of the International Congress of Geologists at Zürich. Good work appears to have been done, in exploring and mapping, among the glaciers of New Zealand, in the course of which Franz-Joseph Glacier, on the west coast, was found to end at a height of 692 feet above the sea, and a distance of four miles from it. The rate of movement is, of course, variable; an average of the observations (with certain omissions) gives 154·2 inches per diem. Valleys containing large glaciers give indications that the ice has been higher than it is at the present day, and has paused at four different levels. Work also has been done among the glaciers of the eastern side of New Zealand, and a few facts are recorded; among them, that in advancing the ice appears not to plough up the earth. In conclusion, Mr. Marshall Hall calls upon mountain climbers to help in the work of the Committee.

A PAPER on "The Brain of the Microcephalic Idiot," by Prof. D. J. Cunningham, F.R.S., and Dr. Telford-Smith, read before the Royal Dublin Society nearly a year ago, and noticed at the time in these columns (NATURE, vol. l. p. 287), has just been published in the Society's *Transactions*. The authors give the results of a thorough examination of the brains and skulls of two typical microcephales. Their study leads them to accept the view arrived at by Sir George Humphry, from an examination of microcephalic and macrocephalic skulls, viz.: "There is nothing in the specimens to suggest that the deficiency in the development of the skull was the leading feature in the deformity, and that the smallness of the bony cerebral envelope exerted a compressing or dwarfing influence on the brain, or anything to give encouragement to the practice lately adopted in some instances of removal of a part of the bony case, with the idea of affording more space and freedom for the growth of the brain. In these, as in other instances of man and the lower animals, the brain-growth is the determining factor, and the skull grows upon and accommodates itself to the brain, whether the latter be large or small."

DR. W. M. HAFFKINE has brought together his Indian experiences in anti-choleraic inoculations, and has published them in the *Indian Medical Gazette*. In spite of the very numerous difficulties which he had to encounter in carrying out his investigations, Dr. Haffkine has succeeded, with the assistance of others, in inoculating no less than 32,166 individuals with his cholera vaccine. Every pains was taken to obtain trustworthy records of the results derived from these inoculations, and, as far as can be judged from the data to hand, the balance appears to be decidedly in favour of the process. This is perhaps especially brought out by Dr. Haffkine's work in Calcutta, where the percentage of attacks and deaths amongst the inoculated was 1·18 per cent., whilst amongst the non-inoculated the percentage of cases amounted to 15·63 per cent., and of deaths 11·63 per cent. One fact has indisputably been established by these investigations, and that is the harmlessness of the operation; in view of this it is to be hoped that the inoculations may be more widely spread, and further facilities thus offered for the collection of observations on this very important subject.

A YEAR'S actinometric observations, made at the Konstantinow Observatory, Pawlowsk, are recorded by J. Schukewitch in the *Repertorium für Meteorologie*. They have led to some unexpected results regarding the intensity of the sun's radiation at different seasons of the year. This intensity, as measured on the surface of the earth, depends upon the altitude of the sun and upon the transmitting power or opacity of the atmosphere. The intensities were measured by a thermometer with blackened bulb, which was exposed to the sun side by side with a precisely similar one which was kept in the shade. To test whether the two thermometers were identical in their behaviour, two successive readings were taken, in which first the one and then the other was shaded. It was found necessary to take the mean of these two readings in each case. The tables embodying the results contain, besides the intensity, the state of the sky, the altitude of the sun, and other meteorological data. From these tables the yearly course of intensity of the unclouded sun at noon is worked out. It shows a principal maximum in April, a secondary maximum in September, and chief minimum in November. The intensity of solar radiation for equal altitudes is greatest in winter and least in summer, a circumstance which tends to equalise the winter and summer temperature. A great diminution of transmissibility is brought about by that phenomenon so characteristic of the middle-European continent, called in Germany *Höhenrauch*, an elevated stratum of peat-smoke which gives a faint and rather pleasant odour, usually taken to indicate the continuance of fine weather. The author finds greater opacity in front of an atmospheric depression, and greater transmissibility after it. The clearest air is preceded by a heavy summer rain.

THE Meteorological Council have published a valuable set of monthly meteorological charts of the Red Sea, showing the prevalent winds and currents, with other information of use to seamen passing through the Suez Canal to India. The wind observations alone number nearly 75,000, and have been supplied from logs specially kept for the Meteorological Office, from ships belonging to the Royal Navy, and various other sources. Each chart, of which there are twenty-four, contains useful remarks referring to the leading features, which are shown graphically, and the introduction to the Atlas contains an interesting general summary by Lieutenant C. W. Baillie, R.N., Marine Superintendent. The wind charts show that from October to January northerly winds are prevalent over the northern half of the sea, and southerly over the southern portion. From February to May the northerly winds extend further south, while southerly winds prevail from near Perim to about the 16th parallel. From June to September, northerly winds blow over nearly the whole sea. Gales are most frequent between November and March; they generally blow from the southward, and are mostly met with in the southern part of the sea. The currents are somewhat erratic, and while occasional strong streams are experienced locally, their velocity is not usually great over large areas. The Gulf of Aden may be taken as an exception, as the currents often set there with considerable velocity. An interesting feature has been noticed in the range of sea-temperature in the Strait of Bab-el-Mandeb, near the Island of Perim, where it amounts to 26° at the period of the S.W. monsoon. The whole work shows evidence of the great care and labour bestowed upon it.

THE extent to which many of the American agricultural experiment stations are devoting attention to the culture of small fruits and other minor crops is perhaps significant of an impending change in the economic bearings of the management of the soil, and of the partial displacement of the *grande culture* which has hitherto almost monopolised the field of experimental inquiry. Bulletin No. 55 of the Purdue University Station, Lafayette, Indiana, opens with a description of experiments with small fruits, carried out in response to the numerous inquiries received from farmers and others concerning the different varieties of such fruits. Strawberries, raspberries, blackberries, currants, gooseberries, and grapes, form the subject of this section of the report. Field experiments with maize and oats are next dealt with, and amongst the results noted, it is stated that better yields have followed the sowing of two bushels or more of oats per acre than that of any smaller quantity. The bulletin concludes with a notice of experiments with sugar beet; but in view of the desperate condition to which the beet-growers of France are at present reduced—despite the artificial support which the sugar industry there receives under the bounty system—we cannot see any immediate hope for the American beet-sugar industry. This, indeed, is practically admitted in the bulletin, for it is said: "The condition of the sugar business throughout all sugar-producing countries is such that there seems to be little probability of capital being invested in beet-sugar plants in this country at present." The points which are reported upon include comparison of varieties, time of harvest, the respective effects of bacterial disease and beet scab on the sugar content of beets, the effect of loosening beets some time before lifting them from the ground, special thinning, tests of foreign and American seed, and yield and cost of crop per acre. It is concluded that, under more favourable economic conditions, beet factories might advantageously be established in the State of Indiana.

A PAPER by Wilhelm von Bezold, on the lines of equal disturbance of the magnetic potential of the earth, appears in a recent number of the *Sitz. der Akad. der Wiss. zu Berlin.* The deviation of the potential at any place from the mean value of the potential corresponding to the parallel of latitude passing through this place being called the disturbance, the author gives the theory of the lines of equal disturbance. He shows that the westerly (or easterly) component of the earth's magnetism is given by the rate of change of the disturbance of the potential along the parallel of latitude or $W = \frac{\partial Va}{\partial y}$ where Va is the disturbance for the potential, and ∂y is an element of a latitude circle. Hence it follows that a knowledge of a westerly component of the earth's field for the whole surface of the earth suffices to everywhere determine the disturbance in the magnetic potential, and draw the lines of equal disturbance. Wherever the lines of equal disturbance are tangential to a circle of latitude $\frac{\partial Va}{\partial y} = 0$, and hence $W = 0$, or all such points will lie on the agonic lines, *i.e.* the lines along which the declination is zero. At all places where the lines of equal disturbance are tangential to the terrestrial meridian the northerly component of the earth's field has its normal value. The author has constructed a chart of these lines for the epoch 1880, using the data given in the magnetic charts published by G. von Quintus Icilius. The mean value of the magnetic potential for the latitude λ is found to be given with a high degree of accuracy by the expression $V_u = K \sin \lambda$, and the author considers that this simple expression must have some special significance, and not be merely an empirical formula.

A PAPER, by Mr. G. C. Whipple, entitled "Some Observations on the Growth of Diatoms in Surface Waters" (*Technological Quarterly*, vol. vii.), is a valuable contribution to the study of the periodic frequency of microscopic organisms in freshwater areas. The work is noteworthy as having been carried on in a biological laboratory attached to the Boston Water Works. The author's general results are here given: (1) That the growth of diatoms in ponds is directly connected with the phenomena of stagnation; that their development does not occur when the lower strata of water are quiescent, on account of greater density, but rather during those periods of the year when the water is in circulation from top to bottom. (2) That diatoms flourish best in ponds having muddy bottoms. (3) That in deep ponds there are two well-defined periods of growth—one in the spring and one in the autumn; that in shallow ponds there is usually a spring growth but no regular autumn growth, and that other growths may occur at irregular intervals as the wind happens to stir up the water. (4) That the two most important conditions for the growth of diatoms are a sufficient supply of nitrates and a free circulation of air, and that both these conditions are found at those periods of the year when the water is in circulation. (5) That while temperature has possibly a slight influence on the growth of diatoms, it is of so little importance that it does not affect their seasonal distribution. (6) That the increase of diatoms takes place substantially in accordance with the law of geometrical progression, and that the cessation of their growth is caused by the diminution of their food supply.

Mr. H. G. Wells's scientific fantasy, the "Time Machine," which has been appearing as a serial in the *New Review*, will be published in volume form, by Messrs. Heinemann, in the course of a few days.

Mr. Gisbert Kapp has arranged with Messrs. Whittaker and Co. for a translation from the German of his new work on the "Alternate Current Transformer." The volume will be published in the "Specialists' Series" in the autumn.

The papers on the relation of diseases of the spinal cord to the distribution and lesions of the spinal blood-vessels, recently contributed by Dr. R. T. Williamson to the *Medical Chronicle*, have been reprinted and published in book form by Mr. H. K. Lewis.

This week's new editions include Prof. T. Preston's philosophical "Theory of Light," published by Messrs. Macmillan. More than one hundred pages of new matter have been added, a valuable addition being an account of Prof. Newcomb's experiments to determine the velocity of light. The second edition has appeared of the late Prof. Cayley's "Elementary Treatise on Elliptic Functions" (Macmillan), the first edition of which was published in 1876. Another second edition, received during the past week, is "A First Book of Electricity and Magnetism," by Mr. W. Perren Maycock. This book, now greatly enlarged, is published by Messrs. Whittaker and Co.

The Deutsche Seewarte, which, with the year 1894, has completed its twentieth year of useful activity, has just issued the seventeenth volume of *Aus dem Archiv*. This work, which has contained many elaborate and valuable discussions in meteorology, navigation, and nautical astronomy, is now devoted more especially to discussions of practical utility to seamen. Among the articles of more general scientific interest may be mentioned one by Dr. Grossmann, on the application of Bessel's formula in meteorology, and one by Dr. Maurer, on the application of graphical methods in meteorology and physics generally; the latter investigation may possibly lead to the substitution of this method for the use of tables in some of the problems of nautical astronomy.

The additions to the Zoological Society's Gardens during the past week include six Hairy-footed Jerboas (*Dipus hirtipes*), two Lesser Egyptian Gerbilles (*Gerbillus ægyptius*), two Lybian Zorillas (*Ictonyx lybica*), two Grey Monitors (*Varanus griseus*), two Egyptian Mastigures (*Uromastix spinipes*), three Egyptian Geckos (*Tarentola annularis*), a Common Chameleon (*Chamæleon vulgaris*), seven Common Skinks (*Scincus officinalis*), two Cerastes Vipers (*Vipera cerastes*), two Diademed Snakes (*Zamenis diadema*), from Egypt, presented by Dr. John Anderson, F.R.S.; a Grysbok (*Neotragus melanotis*, ♀), from South Africa, presented by Mr. J. E. Matcham; a Wapiti Deer (*Cervus canadensis*, ♀), a Japanese Deer (*Cervus sika*, ♀), a Burchell's Zebra (*Equus burchelli*, ♂), two Polar Hares (*Lepus glacialis*), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

Mercury and Venus.—The planet Mercury is now an evening star, and will be favourably placed for observation until towards the end of June. The greatest elongation will occur on June 4 at 13h., when the planet will transit about 1h. 42m. after the sun; the declination will then be nearly 25° north, and the apparent diameter a little over 8″. Jupiter will be in close proximity to Mercury during the present period of its visibility, so that observers not employing telescopes must be careful to discriminate between the two; at the elongation, Mercury will precede Jupiter by about 8m. in R.A., and will be about 1½ degrees farther north. The two planets will be in actual conjunction on June 8 at 4h., Mercury being 0° 47′ N. of Jupiter.

Venus, also, is most favourably situated for observation at the present time, and the great brilliance of the planet in the western sky after sunset cannot fail to attract the attention of the most indifferent. It will not, however, reach maximum brightness until August 13. The greatest eastern elongation will occur on July 11, and the apparent diameter will increase from 16″ on June 1 to 59″ at the inferior conjunction on September 18.

The Total Solar Eclipse of 1898 January 21-22.—In addition to the eclipse of the sun which will take place on August 8, 1896, and for which we understand preparations are already well in hand, there will be another important solar eclipse before the end of the present century. This will occur on January 21–22, 1898, and the *Nautical Almanac Circular*, No. 16, gives local particulars of the same for that portion of the path of the shadow which lies across India. At Rajapur the duration will be 2m. 1·9s. and the altitude of the sun 53°; at Nagpur, 1m. 17·7s. with an altitude of 46°; and at a position south of Benares, 1m. 43·6s. with an altitude of 40°. Information as to the meteorological conditions prevailing at various points along the track of the eclipse during the latter part of January is being collected through the assistance of Mr. Eliot, Meteorological Reporter to the Government of India. It is proposed to publish this information early in 1897.

As the next sun-spot minimum is not due until the year 1900, observations of the phenomena of this eclipse will furnish information as to the solar conditions during the transition from maximum to minimum.

The Astro-photographic Chart.—The third part of the second volume of the *Bulletin* of the International Permanent Committee, gives an account of the present state of the great undertaking to prepare a photographic catalogue and chart of the heavens. The reports from the various participating observatories indicate in general a rapid advance towards the completion of the photographs which are intended to form the basis of the catalogue; four of the eighteen observatories have already completed the zones allotted to them, and it is expected that at least eight more will reach this stage by next spring. Systematic work at the South American observatories has been seriously interfered with by political events; but it is satisfactory to learn that the Australian and Cape of Good Hope astronomers are prepared to come to their assistance. An immense number of catalogue plates with short exposures has been taken with the various instruments, no less than 753 having been taken at Paris, and 1562 at the Cape. The measurement of the catalogue plates is also in a forward state at several of the observatories, but the reductions have scarcely been commenced.

For the chart itself, not one-third of the requisite photographs have yet been obtained, but the progress of this part of the work is necessarily slow, in consequence of the long exposures required.

Dr. Gill proposes that the Committee should meet in 1896, to reconsider the various questions left open at the former conference, among which one of the most important relates to the scale of magnitudes to be adopted.

Four important memoirs also form part of the present report. Prof. Turner and M. Prosper Henry discuss different methods of reducing the plates, M. Trépied gives his experience and views as to the determination of magnitudes, and M. Donner discusses the various corrections for instrumental errors.

Award of the Watson Medal.—On the recommendation of the Board of Trustees of the Watson Fund, the U.S. National Academy of Sciences last year unanimously awarded the Watson medal to Dr. S. C. Chandler, for his investigations relative to variable stars, his work in connection with the variation of terrestrial latitudes, and his researches on the laws of that variation. The recommendation was noted in these columns a year ago, and a description of the founding of the award was given (Nature, vol. l. p. 157). The medal was presented to Dr. Chandler at the recent meeting of the National Academy, and *Science* for May 3 contains the report of the Trustees, setting forth the grounds upon which the award was made, and briefly stating the history of the investigation of changes of latitude. Dr. Chandler's work upon the subject began with observations made by him in 1884-85. His observations, continued uninterruptedly for thirteen months, revealed a progressive change of a pronounced periodical character in the